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DESCRIPTION

SLIDER FOR SEALABLE STORAGE BAG AND SEALABLE STORAGE BAG PROVIDED
WITH THE SLIDER

TECHNICAL FIELD

The present invention relates to the improvement of a slider for causing fastener members, which are disposed so as to oppose each other at inner surfaces of an opening of a sealable storage bag, to be fitted together by sliding the slider along the fastener members from the outer side of the sealable storage bag to thereby close the opening.

BACKGROUND ART

Conventionally, numerous sliders of this type have been provided. For example, the slider described in the invention disclosed in Japanese Utility Model Registration No. 3059677 is known. As shown in Figs. 8A to 8C, the slider includes two opposing pieces 102 that are integrally provided with a base portion 101 so as to oppose each other. Fitting grooves 103, into which fastener members 202 of the sealable storage bag (see Fig. 9) are inserted to fasten the fastener members 202, are disposed in inner surfaces of the opposing pieces 102. A tongue-shaped stopper 104 is disposed between the opposing pieces 102 so as to project from the base portion 101 of the opposing pieces 102. A leading end of the stopper 104 is disposed short so that it is positioned in front of the base portion 101 side

of the fitting grooves 103, and the opposing pieces 102 are pushed together by the slider's own elasticity.

According to the above-described configuration, a simple means pushes open a front closing portion 102a of the opposing pieces 102 of the slider counter to the elastic force of the opposing pieces 102 so that an edge of an opening 201 of the sealable storage bag is sandwiched between the opposing pieces 102, and the fastener members 202 disposed at inner surfaces of both sides of the edge of the opening 201 of the sealable storage bag are fitted inside the fitting grooves 103 disposed in the inner surfaces of the opposing pieces 102, whereby the slider is attached to the edge of the opening 201 of the sealable storage bag so that the opening 201 of the sealable storage bag can be smoothly, reliably, efficiently and repeatedly opened and closed by the sliding operation of the slider.

However, with respect to this conventional slider, it has been difficult to push open the front closing portion 102a counter to the elastic force of the opposing pieces 102 without borrowing the force of an opener. Thus, with respect to domestic users of the sealable storage bag, it has been difficult for them to attach the slider by hand when the slider has come free from the sealable storage bag.

There are many instances where sealable storage bags to which the slider is to be attached are formed by adhering two resin sheets together. As shown in Fig. 9, the fastener members 202, which comprise a convex strip portion and a concave strip

portion that oppose each other, are disposed at the inner surfaces of the opening 201 of the sealable storage bag, and the opening 201 is closeable by fitting together the convex strip portion and the concave strip portion.

The resin sheets are adhered together at both end portions of the opening 201 by means such as heat-seal, whereby end seals 203 are formed. A predetermined range of the end portion of each fastener member 202 is sandwiched in the end seals 203, whereby continual blocking portions 202a that block off the circulation of air are formed in a state where the convex strip portion and the concave strip portion are fitted together.

It should be noted that, since the shown upper and lower portions of each end seal 203 that sandwich the fastener members 202 reliably form the continual blocking portions 202a as described above, the end seals 203 are formed so as to protrude towards the inner side of the opening 201. Thus, the continual blocking portions 202a are also positioned towards the inner side of the opening 201 in correspondence thereto.

There is a slider provided with push protrusions 105 at inner portions of the fitting grooves 103, as indicated by the dotted lines in Figs. 8A to 8C, in order to push together the fastener members 202 with a stronger force.

Here, as shown in Fig. 9, the continual blocking portions 202a are positioned further to the inner side of the opening 201 than the position of the end seals 203 at a more upper side than the fastener members 202. Thus, when a slider provided with the push protrusions 105 is used, there are cases where

the so-called capillary phenomenon occurs where gaps arise between the push protrusions 105 and the continual blocking portions 202a, the air sealability between the inside and the outside of the sealable storage bag cannot be maintained, and air ends up circulating as indicated by the arrow in Fig. 9, regardless of the fact that the fastener members 202 are closed. This becomes a serious defect when the sealable storage bag is used as a compressed bag whose volume is reduced by removing the air inside the bag.

In light of the above, it is a first object of the invention to provide a slider that can be easily attached by hand without using a special implement such as an opener.

It is a second object of the invention to provide a slider that can completely seal a sealable storage bag and a sealable storage bag provided with the slider.

DISCLOSURE OF THE INVENTION

In order to achieve the above objects, a first aspect of the present invention defined in claim 1 provides a slider for a sealable storage bag for causing fastener members F that include at least one set of a convex strip portion F1 and a concave strip portion F2 disposed so as to oppose each other at inner surfaces of an opening B1 of the sealable storage bag B to be fitted together by sliding the slider 1 along the opening B1 from an outer side of the sealable storage bag B to thereby close the opening B1, the slider 1 comprising two opposing pieces 2 that are engaged

with each other at a base end side and arranged with a predetermined interval therebetween at a leading end side, the opposing pieces 2 disposed at the opening B1 so as to externally cover part of the opening B1; at least one push protrusion 3 that pushes the fastener members F from the outer side of the sealable storage bag B to cause the convex strip portion F1 and the concave strip portion F2 to be fitted together so as to protrude from an inner surface 22 of at least one of the opposing pieces 2; and a tongue-shaped stopper 4 that protrudes from part of the opposing pieces 2 towards a space 2a between the opposing pieces 2, 2, with a leading end of the stopper 4 positioned further towards the base end side than the push protrusion 3, the stopper 4 having a base portion 41 disposed at the opposing pieces 2 and an expanded portion 42 disposed at the leading end side of the base portion 41, wherein

a width dimension W42 of the expanded portion 42 that is a dimension along a sliding direction S exceeds a width dimension W41 of the base portion 41, the width dimension W42 being equal to or less than a width dimension W2 of the opposing pieces 2, and wherein

a dimension W3 between one end edge 3a and the other end edge 3b of the push protrusion 3 in the sliding direction S is equal to or less than the width dimension W42 of the expanded portion 42.

A second aspect of the present invention defined in claim 2 provides the slider for a sealable storage bag according to

claim 1, wherein positions of end edges 42b, 42c of the expanded portion 42 in the sliding direction S are respectively present at 1 mm to 3 mm inward from positions of end edges 22a, 22b of the opposing pieces 2.

A third aspect of the present invention defined in claim 3 provides the slider for a sealable storage bag according to claim 1 or 2, wherein at least one end edge 22a, 22b of the opposing pieces in the sliding direction is provided with alignment-use notches 6 for positioning when a plurality of sliders 1 are superposed, and wherein the expanded portion 42 is disposed offset from the alignment-use notches 6 in a direction orthogonal to the sliding direction S.

A fourth aspect of the present invention defined in claim 4 provides the slider for a sealable storage bag according to any one of claims 1 to 3, further comprising guide-use protrusions 5 protruding from at least one inner surfaces 22 of the opposing pieces 2, the guide-use protrusions 5 disposed parallel to the sliding direction S further towards the leading end side than the push protrusion 3, the guide-use protrusions 5 disposed at a predetermined distance from the leading end of the opposing pieces 2 towards the base end thereof, to thereby provide a space 2b defined by the leading end portions of the opposing pieces 2 and the guide-use protrusions 5, the guide-use protrusions including inclined surfaces 51 disposed at portions towards the inner side from both ends of the guide-use protrusions 5 in the

sliding direction S, the inclined surfaces 51 formed so that the height of the guide-use protrusions 5 gradually becomes higher from the both ends towards the inside; and a space 2c defined by both the inclined surfaces 51, 51 of both the guide-use protrusions 5, 5.

A fifth aspect of the present invention defined in claim 5 provides a sealable storage bag formed by adhering together two resin sheets, comprising fastener members F disposed at inner surfaces of an opening B1 of the sealable storage bag B, the fastener members F including at least one set of a convex strip portion F1 and a concave strip portion F2 that oppose each other, the opening B1 being closeable by fitting together the convex strip portion F1 and the concave strip portion F2; end seals B2 disposed at both end portions of the opening B1, the end seals formed by adhering the convex strip portion F1 and the concave strip portion F2 of the fastener members F together with the resin sheets; and continual blocking portions F3 that block the circulation of air, disposed in predetermined ranges of the fastener members F nearest the end seals B2 with the convex strip portion F1 and the concave strip portion F2 remaining fitted together, wherein for closure of the opening B1, the slider 1 of claim 1 is attached to the opening B1 while the expanded portion 42 of the stopper 4 abuts against the end seal B2 at a more upper side than the fastener members F of the sealable storage bag B, such that the push protrusion 3 disposed at the slider 1 and the continual blocking portion F3 of the sealable storage bag

B abut against each other.

A sixth aspect of the present invention defined in claim 6 provided the sealable storage bag according to claim 5, wherein an end edge B1a of one resin sheet and an end edge B1b of the other resin sheet are disposed so as to be vertically offset at the opening B1.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1A is a front view showing a slider of the invention, and Fig. 1B is a plan view of the slider and Fig. 1C is a right side view of the slider.

Fig. 2A is a cross-sectional view along line A-A of Fig. 1A, and Fig. 2B is a cross-sectional view along line B-B of Fig. 1A.

Fig. 3 is a plan view showing a state where the slider is attached to a sealable storage bag.

Fig. 4 is a cross-sectional view of relevant portions along line C-C of Fig. 3.

Fig. 5 is an explanatory view showing a state where the slider is attached to the sealable storage bag and an opening of the sealable storage bag is closed.

Fig. 6 is an explanatory view showing a method of attaching the slider to the opening of the sealable storage bag.

Fig. 7 is an explanatory view showing a state where the slider is disposed in a holder of an opener.

Fig. 8A is a plan view showing a conventional slider, and

Fig. 8B is a front view of the conventional slider, and Fig. 8C is a cross-sectional view along line D-D of Fig. 8A.

Fig. 9 is an explanatory view showing a state where the conventional slider is attached to a sealable storage bag and an opening of the sealable storage bag is closed.

BEST MODE FOR CARRYING OUT THE INVENTION

An example of an embodiment of the invention will be described below on the basis of the drawings. Figs. 1A, 1B, 1C, 2A and 2B show a slider 1 of the embodiment, and Figs. 3 and 4 show a state where the slider 1 is attached to a sealable storage bag B.

The slider 1 of this example is molded using, as a raw material, a hard plastic such as polypropylene. The slider 1 is configured by a joint portion 21, substantially rectangular opposing pieces 2 that include base end sides joined with the joint portion 21 so that the opposing pieces 2 are integrally disposed therewith opposing each other, and a tongue-shaped stopper 4, which is disposed so as to protrude from the joint portion 21 of the opposing pieces 2 into a space 2a between the opposing pieces 2. When the slider 1 is attached to the sealable storage bag B as shown in Fig. 3, the slider 1 is slid in a sliding direction S that is a direction along the joint portion 21 so that an opening B1 of the sealable storage bag B can be closed.

Guide-use protrusions 5 are disposed so as to project from

inner surfaces 22 of the opposing pieces 2. The guide-use protrusions 5 are formed along the sliding direction S of the slider 1 and, together with the stopper 4, allow the slider 1 to slide along fastener members F when the slider 1 is attached to the sealable storage bag B.

In this embodiment, the guide-use protrusions 5 are respectively disposed at each opposing piece 2. The guide-use protrusions 5 are strongly urged towards each other by the rigidity and elasticity of the slider 1 itself, which comprises a hard plastic. As shown in Figs. 3 and 4, when the slider 1 is attached to the opening B1 of the sealable storage bag B, the guide-use protrusions 5 catch on the fastener members F so that the slider 1 does not easily come free from the opening B1.

Although the slider 1 in this embodiment is configured so that one set of guide-use protrusions 5 corresponds to one set of fastener members F comprising a convex strip portion F1 and a concave strip portion F2, the slider 1 may also be configured so that two sets of guide-use protrusions 5 are disposed so as to sandwich portions above and below one set of fastener members F.

As described above, it is preferable to dispose the guide-use protrusions 5 at each opposing piece 2 so that it is difficult for the slider 1 to come free from the opening B1 of the sealable storage bag B, but the slider 1 may also be configured so that the guide-use protrusions 5 are disposed only at either one of the opposing pieces 2.

As shown in Figs. 1A and 2A, the guide-use protrusions 5 are formed a predetermined distance away from leading ends of the opposing pieces 2 towards the base end sides of the opposing pieces 2. Thus, a leading end portion space 2b defined by the leading end portions of the opposing pieces 2 and the guide-use protrusions 5 is formed. Also, inclined surfaces 51 are formed at portions of the guide-use protrusions 5 at inner sides from both ends in the sliding direction S. As shown in Fig. 1C, the inclined surfaces 51 are formed so that the height of the guide-use protrusions 5 from the inner surfaces 22 of the opposing pieces 2 gradually becomes higher from the ends of the guide-use protrusions 5 towards the inner sides thereof. Thus, side portion spaces 2c defined by the opposing inclined surfaces 51 are formed.

Due to the formation of the leading end portion space 2b and the side portion space 2c, when using an opener, the leading end portion space 2b can be easily opened by inserting, in the leading end portion space 2b between the opposing pieces 2, opener claws with which the opener is disposed.

Also, in a case where the slider 1 is attached by hand to the sealable storage bag B without using an opener, as shown in Fig. 6, an end portion 42a of an expanded portion 42 of the later-described stopper 4 is inserted in the opening B1 of the sealable storage bag B, while part of the edge opening B1 is positioned in the leading end portion space 2b and the side portion spaces 2c, and then the slider 1 is rotated in the direction of the arrow shown in Fig. 6 so that the slider 1 is completely

fitted into the opening B1, whereby, as in the case where an opener is used, the slider 1 can be easily attached to the opening B1 without pushing open the opposing pieces 2.

With respect to the opening B1 of the sealable storage bag B, as shown in Fig. 6, it is preferable for an end edge B1a of one resin sheet (top side) and for an end edge B1b of the other resin sheet (bottom side) to be formed slightly offset in the vertical direction, so that the end portion 42a of the expanded portion 42 can be more easily inserted. A dimensional difference h between the end edges B1a and B1b is preferably 2 mm to 5 mm. Also, the end edges B1a and B1b are not limited to the end edges of the resin sheets configuring the sealable storage bag B itself as described above. End edges of sheet-like portions (not shown) serving as the bases of the convex strip portion F1 and the concave strip portion F2 of the fastener member F may also be used.

In this embodiment, as shown in Figs. 1A and 2A, the stopper 4 includes a base portion 41, which is disposed so as to protrude from the joint portion 21 of the opposing pieces 2 towards the space 2a between the opposing pieces 2, and the expanded portion 42 formed at a leading end side of the base portion 41.

As shown in Fig. 2A, the expanded portion 42 is such that a width dimension W42 thereof, which is a dimension along the sliding direction S, exceeds a width dimension W41 of the base portion 41, and the expanded portion 42 is formed so that the end portion 42a protrudes from both sides of the base portion

41. Although the base portion 41 in this embodiment is disposed at the joint portion 21, the base portion 41 is not limited thereto. It suffices as long as the base portion 41 is formed at part of the opposing pieces 2.

The width dimension W42 of the expanded portion 42 is equal to or less than a width dimension W2 of the opposing pieces 2. Specifically, each end edge 42b and 42c of the expanded portion 42 in the sliding direction S is respectively positioned 1 mm to 3 mm inward from each end edge 22a and 22b of the opposing pieces 2 in the sliding direction S.

Also, a leading end 42d of the stopper 4 is disposed short so as to be positioned further towards the base end side, i.e., towards the side of the joint portion 21, than later-described push protrusions 3. Thus, when the slider 1 is attached to the sealable storage bag B as shown in Fig. 3, the stopper 4 is positioned above the fastener members F of the sealable storage bag B. Due to the stopper 4 being disposed at the opening B1 in this manner, when the slider 1 has been slid along the opening B1, the stopper 4 abuts against end seals B2 formed by both edges of the sealable storage bag B being adhered together and does not advance further, so that it is possible to know that the opening B1 has been tightly and completely closed, and the slider 1 can be prevented from coming free from the sealable storage bag B from the side.

Here, as will be described later, alignment-use notches 6 for orderly superposing a plurality of sliders 1 are formed in both end edges 22a and 22b of the opposing pieces 2 as shown

in Fig. 1B. In this embodiment, two notches are formed in each end edge 22a and 22b of the opposing pieces 2. It should be noted that the shape, position and number of the alignment-use notches 6 are not limited to those of this embodiment and can be variously altered.

As shown in Fig. 2A, the expanded portion 42 is formed so that its position surrounded by the alignment-use notches 6, i.e., its position in the direction orthogonal to the sliding direction S, is offset from the alignment-use notches 6. This is to prevent interference resulting from alignment-use convex ridges H1 of a holder H used in an opener being disposed at the positions of the alignment-use notches 6, as shown in Fig. 7.

In this embodiment, as shown in Figs. 1A and 2A, the push protrusions 3 are formed, so as to project from the inner surfaces 22 of the opposing pieces 2, at positions further towards the base end side than the guide-use protrusions 5. In this embodiment, as shown in Fig. 2B, surfaces of the push protrusions 3 along the sliding direction S are formed as curved surfaces. However, the shapes of the push protrusions 3 are not limited to the shapes in this embodiment and may be formed as planar surfaces or variously altered. The push protrusions 3 are disposed so as to sandwich the fastener members F from outer sides of the sealable storage bag B as shown in Fig. 4 when the slider 1 is attached to the sealable storage bag B as shown in Fig. 3. The push protrusions 3 push together the fastener members F from the outer sides of the sealable storage bag B to cause

the convex strip portion F1 and the concave strip portion F2 of the fastener member F to be fitted together.

A dimension W3 shown in Fig. 2A between one end edge 3a and the other end edge 3b of the push protrusions 3 in the sliding direction S is equal to or less than the width dimension W42 of the expanded portion 42 of the stopper 4. Thus, a step of a dimension D is disposed between the stopper 4 and each push protrusion 3.

Here, as shown in Figs. 3 and 5, the end seals B2 are formed by adhering together, with means such as heat-sealing, the resin sheets configuring the sealable storage bag B at both end portions of the opening B1 of the sealable storage bag B in this embodiment, as has conventionally been the case. Usually, fastener member-use seals B3, which are separate from the end seals B2 and protrude towards the inner side of the opening B1, are formed at upper and lower portions of the sealable storage bag B sandwiching the fastener members F.

Predetermined ranges of end portions of the fastener members F are fitted into the fastener member-use seals B3 to form the continuously blocked-off portions F3 blocking off circulation of air with the convex strip portion and the concave strip portion being fitted together. Thus, the continuously blocked-off portions F3 are also present at positions where they protrude towards the inner side of the opening B1 in correspondence to the formation of the fastener member-use seals B3, and the differences in the positions between the end seals

B2 and the continuously blocked-off portions F3 are the dimensions D.

It should be noted with respect to the compressed bag B pertaining to the present invention that it is not necessary to form the fastener member-use seals B3. Conversely, it is also possible to form the continuously blocked-off portions F3 so that they do not protrude from the end seals B2 by forming the upper and lower portions sandwiching the fastener members F at the outer side of the opening B1. Also, various modes can be employed.

As described above, in the slider 1 of this embodiment, the dimension W3 of the push protrusions 3 is equal to or less than the width dimension W42 of the stopper 4, and a step of the dimension D, which is same in length as the difference in the position between the end seal B2 of the compressed bag B and the continuously blocked-off portion F3, is disposed each side(see Fig. 2A). Thus, when the slider 1 is attached to the sealable storage bag B and the opening B1 is closed by sliding the slider 1 therealong, the end edge 42c at one side of the expanded portion 42 of the stopper 4 abuts against the end seal B2 of the sealable storage bag B as shown in Fig. 5 and, at the same time, the end portions 3b at one side of the push protrusions 3 and the continuously blocked-off portion F3 of the sealable storage bag B are made to abut against each other without gaps therebetween, so that gaps can be eliminated. Thus, there is not the drawback where, as has conventionally been the case, gaps arise between the push protrusions 3 and the continuously

blocked-off portion F3 of the sealable storage bag B so that air ends up circulating without the sealability between the inside and the outside of the sealable storage bag B being maintained. Thus, a sealable storage bag with high reliability can be provided even in a case where the sealable storage bag B is used as a compressed bag.

Next, a method of using the slider 1 of this embodiment configured as described above will be described.

First, in a case where an opener is used, the opener claws of the opener are inserted in the leading end portion space 2b between the opposing pieces 2 of the slider 1 that are in a closed state. Usually, two opener claws form one set, and they are operated together so as to move apart in the vertical direction, so that the space 2a between the opposing pieces 2 of the slider 1 can be opened.

In a state where the space 2a between the opposing pieces 2 of the slider 1 has been opened as described above, the stopper 4 of the slider 1 is inserted inside the opening B1 of the sealable storage bag B to position the guide-use protrusions 5 of the opposing pieces 2 along the fastener members F. Thereafter, when the opener claws of the opener are made to approach each other and the push-open force applied to the opposing pieces 2 is released, the opposing pieces 2 are closed together due to their own elasticity. Thus, as shown in Fig. 4, the slider 1 is attached to the edge of the opening B1 so that the push protrusions 3 push together the fastener members F of the sealable

storage bag B.

Since the guide-use protrusions 5 are disposed in this manner along the fastener member F, the slider 1 is reliably attached to the edge of the opening B1 of the sealable storage bag B, there is no potential for the slider 1 to come free, and the slider 1 is slidably attached to the opening B1.

The method of attaching the slider 1 using the opener is used mainly in manufacturing the sealable storage bag B in a factory. Thus, the sealable storage bag B to which the slider 1 is attached can be efficiently manufactured.

It should be noted that the slider 1 pertaining to the present invention is characterized in that it can be easily attached by hand without using the opener as described above. Specifically, as shown in Fig. 6, at least part of the end portion 42a of the stopper 4 of the slider 1 is inserted inside the opening B1 of the sealable storage bag B so that the edge of the opening B1 is sandwiched by the guide-use protrusions 5. By rotating the slider 1 in the direction of the arrow shown in the drawing, it can be easily placed in the state shown in Figs. 3 and 4. Since the slider 1 can be easily attached by hand this manner to the opening B1 of the sealable storage bag B, it is easy for household users of the sealable storage bag B to attach the slider 1 to the sealable storage bag B with their hand when the slider 1 has come free from the sealable storage bag B.

Next, a method of use will be described where the sealable storage bag B to which the slider 1 is attached is used as a compressed bag, as illustrated in Fig. 3.

When the slider 1 is disposed at one corner of the sealable storage bag B and slid as far as the other corner of the sealable storage bag B, the convex strip portion F1 and the concave strip portion F2 of the fastener members F disposed at the opening B1 are pushed together by the push protrusions 3 respectively disposed at the inner surfaces 22 of the opposing pieces 2 of the slider 1, whereby the convex strip portion F1 and the concave strip portion F2 are reliably fitted together so that the opening B1 can be reliably and tightly closed.

At this time, since the stopper 4 disposed at the slider 1 is inserted as far as the upper side of the fastener members F between the edges of the opening B1, the stopper 4 does not interfere with the sliding operation of the slider 1. Additionally, when the sliding operation of the slider 1 has been completed, the stopper 4 abuts against the end seals B2 and does not advance further because the end seals B2 are formed at both side edges of the sealable storage bag B. Thus, the user notices that the closing of the opening B1 has been done, and the slider 1 can be prevented from coming free from the sealable storage bag B therefrom.

Next, the sealable storage bag B with a one-way valve V is pressed from the outside, or a nozzle of the vacuum is inserted in the one-way valve V to suck out, whereby the air in the sealable storage bag B is discharged through the one-way valve V and the volume of contents W such as clothes or blankets stored in the sealable storage bag B is compressed. Thus, there is no potential for influx of air into the bag through the opening B1 despite

a long period of time, and the compact state of the bag can be maintained long.

In particular, in the present invention, the dimension W3 of the push protrusion 3 of the slider 1 is made equal to or less than the width dimension W42 of the expanded portion 42 of the stopper 4 as described above, and a step of the dimension D is disposed each side (see Fig. 2A). Thus, when the opening B1 of the sealable storage bag B is closed, the end seal B2 of the sealable storage bag B and the continuously blocked-off portion F3 including the difference of the dimension D abut against each other without a gap therebetween in a state where the end portion 42c of one side of the expanded portion 42 of the stopper 4 abuts against the end seal B2 of the sealable storage bag B as shown in Fig. 5. Thus, the so-called capillary phenomenon, where gaps arise between the push protrusions 3 and the continual blocking portions F3 of the sealable storage bag B and air ends up circulating without the sealability between the inside and the outside of the sealable storage bag B being maintained, does not occur as has conventionally been the case, so that the reliability of the sealable storage bag B is high.

When the contents W such as clothes and blankets stored inside the sealable storage bag B are to be removed, the engagement between the convex strip portion F1 and the concave strip portion F2 of the fastener member F is directly released by hand. When the contents W are to be stored again, the slider 1 is slid towards the opposite side.

Although an example is described where the sealable storage

bag B of this embodiment is used as a compressed bag, the sealable storage bag B can be also used as a filling bag for being filled with fluids such as liquid or gas.

Furthermore, although the fastener members F of the sealable storage bag B of this embodiment comprises one set of the convex strip portion F1 and the concave strip portion F2, the fastener members F may also include two or more sets of the convex strip portion F1 and the concave strip portion F2, as shown in Fig. 9, or variously changed.

The present invention is not limited to the above-described embodiment and can be variously changed and implemented.

The present invention has the following remarkable effects.

In the first to third aspects of the present invention, it is easy to insert, inside the opening B1 of the sealable storage bag B, the end portion of the expanded portion 42 of the stopper 4 in the sliding direction S. Thus, it is possible to easily attach the slider 1 to the sealable storage bag B by hand without using a special implement for attaching the slider 1 to the sealable storage bag B. Also, the push protrusions 3 can reliably push together and close the fastener members F, whereby the sealable storage bag B can be completely sealed when the slider 1 is attached to the sealable storage bag B.

Also, in the fourth aspect of the present invention, in addition to the aforementioned effects, the spaces 2b and 2c are formed at the leading end portion of the slider 1 due to

the positions on the opposing pieces 2 at which the guide-use protrusions 5 are formed and the presence of the inclined surfaces 51 formed at the guide-use protrusions 5. Since it is easy to sandwich the edge of the opening B1 with the guide-use protrusions 5 through the spaces 2b and 2c, it becomes easy to attach the slider 1 by hand.

Also, in the fifth aspect of the present invention, a sealable storage bag B to which the slider 1 pertaining to the first aspect of the present is attached is provided. Since the push protrusions 3 of the slider 1 and the continual blocking portions F3 of the sealable storage bag B can be made to abut against each other without gaps therebetween in a state where the expanded portion 42 of the stopper 4 abuts against the end seals B2 at a more upper side than the fastener members F of the sealable storage bag B, a totally sealable storage bag B can be provided.

Also, in the sixth aspect of the present invention, in addition to the effect of the fifth aspect of the present invention, the end portion 42a of the expanded portion 42 of the stopper 4 is easily inserted into the opening B1 of the sealable storage bag B when the slider 1 is attached to the sealable storage bag B by hand, so that attachment of the slider 1 is easy.